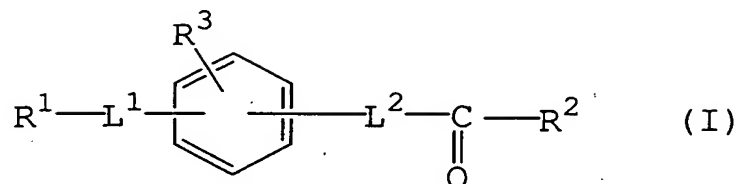


WHAT IS CLAIMED IS:

1. A compound having the following formula (I):



wherein

5 R^1 is N-containing heterocyclic ring optionally substituted with one or more suitable substituent(s),

R^2 is hydroxyamino,

R^3 is hydrogen or a suitable substituent,

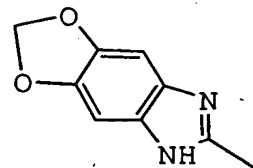
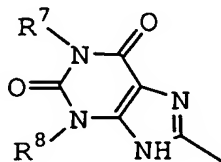
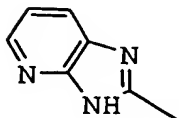
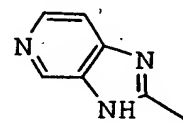
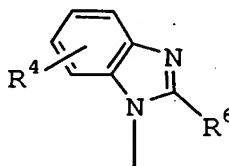
10 L^1 is $-(\text{CH}_2)_n-$ (wherein n is an integer of 0 to 6) optionally substituted with one or more suitable substituent(s), wherein one or more methylene(s) may be replaced with suitable heteroatom(s), and

L^2 is lower alkenylene,
or a salt thereof.

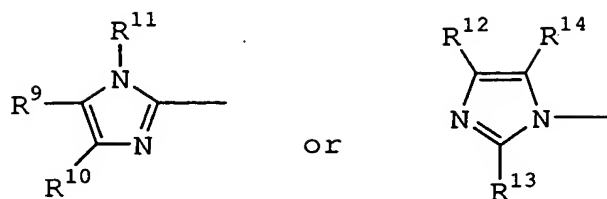
15

2. The compound of claim 1, wherein

R^1 is N-containing heterocyclic ring represented by the following formula:



20



wherein

R^4 is hydrogen or a group selected from the group consisting of

- 5 (1) lower alkyl optionally substituted with di(lower)alkylamino or hydroxy,
- (2) lower alkoxy,
- (3) aryl optionally substituted with the substituent selected from the group consisting of
- 10 halogen, lower alkanoyl, lower alkylsulfonyl, lower alkoxy and di(lower)alkylamino,
- (4) lower alkanoyl,
- (5) lower alkoxy-carbonyl,
- (6) arylcarbonyl,
- 15 (7) aryl(lower)alkoxy,
- (8) amino optionally mono- or di-substituted with substituent(s) selected from the group consisting of lower alkyl, lower alkanoyl and cycloalkyl,
- (9) halo(lower)alkyl,
- 20 (10) aryloxy,
- (11) aryl(lower)alkyl optionally substituted with hydroxy,
- (12) carboxyl,
- (13) nitro,
- 25 (14) cyano,
- (15) halogen,
- (16) heteroaryl,
- (17) non-aromatic heterocycle optionally substituted with lower alkyl,
- 30 (18) hydroxy,
- (19) (lower)alkylsulfonylcarbamoyl and
- (20) non-aromatic heterocycle carbonyl,

R^5 is hydrogen or a group selected from the group

consisting of lower alkyl and aryl(lower)alkyl, and
R⁶, R⁷ and R⁸ are each hydrogen or lower alkyl,
R⁹ is hydrogen or a group selected from the group
consisting of

- 5 (1) lower alkyl optionally substituted with
di(lower)alkylamino,
(2) aryl optionally substituted with lower alkoxy,
(3) (lower)alkoxy-carbonyl,
(4) cyano,
10 (5) carbamoyl optionally mono- or di-substituted
with (lower)alkyl,
(6) halogen,
(7) (lower)alkyl-carbonyl,
(8) arylcarbonyl and
15 (9) cyclo(lower)alkyl,

R¹⁰ is hydrogen or a group selected from the group
consisting of

- (1) (lower)alkylcarbamoyl,
(2) di(lower)alkylcarbamoyl,
20 (3) aryl optionally substituted with halogen,
(4) (lower)alkoxy-carbonyl,
(5) carboxy,
(6) non-aromatic heterocycle carbonyl,
(7) halogen,
25 (8) (lower)alkyl optionally substituted with hydroxy,
(lower)alkoxy, non-aromatic heterocycle, aryl,
di(lower)alkylamino or halogen and
(9) adamantyl,

30 R¹¹ is hydrogen or aryl(lower)alkyl in which the aryl
portion is substituted with lower alkoxy,

R¹² is hydrogen or a group selected from the group
consisting of lower alkyl and aryl optionally
substituted with halogen,

35 R¹³ is hydrogen or a group selected from the group
consisting of lower alkyl and aryl, and

R¹⁴ is hydrogen or lower alkyl,

R² is hydroxyamino,

R³ is hydrogen or lower alkoxy,

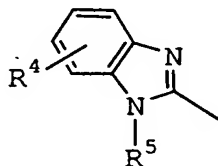
L¹ is -(CH₂)_n- (wherein n is 1 to 5) optionally substituted with one or more substituent(s) selected from lower alkyl(s) and aryl(lower)alkyl, and wherein one methylene may be replaced with an oxygen atom, and

L² is vinylene,

or a salt thereof.

10 3. The compound of claim 2, wherein

R¹ is N-containing condensed heterocyclic ring represented by the following formula:



wherein R⁴ and R⁵ are each as defined in claim 2.

15

4. The compound of claim 3, wherein

R⁴ and R⁵ are each hydrogen,

R² is hydroxyamino,

R³ is hydrogen,

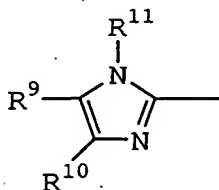
20 L¹ is -CH₂-; and

L² is vinylene,

or a salt thereof.

5. The compound of claim 2, wherein

25 R¹ is N-containing heterocyclic ring represented by the following formula:



wherein R⁹, R¹⁰ and R¹¹ are each as defined in claim 2.

30

6. The compound of claim 5, wherein

R^9 is hydrogen or aryl optionally substituted with lower alkoxy,

R^{10} is hydrogen or aryl optionally substituted with halogen, and

R^{11} is hydrogen,

5 R^2 is hydroxyamino,

R^3 is hydrogen,

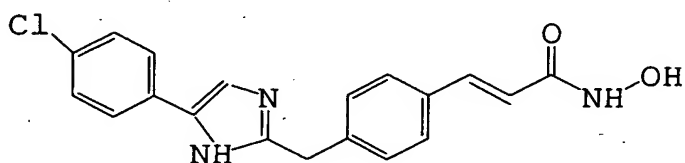
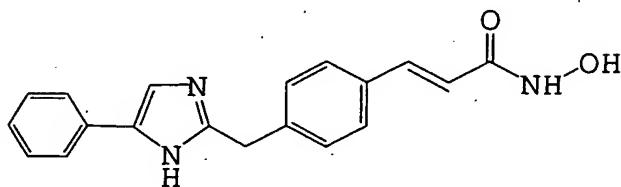
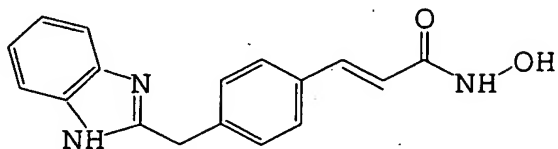
L^1 is $-\text{CH}_2-$, and

L^2 is vinylene,

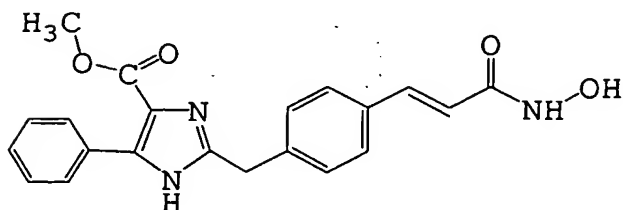
or a salt thereof.

10

7. A compound of the following formula

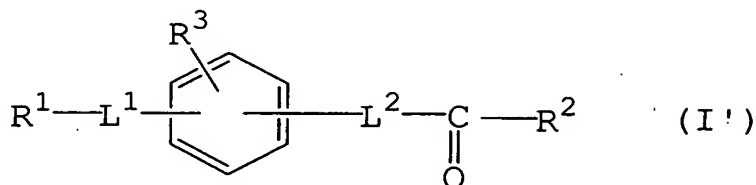


or



15 or a salt thereof.

8. A compound having the following formula (I'):



wherein

R^1 is N-containing condensed heterocyclic ring optionally substituted with one or more suitable substituent(s),

5 R^2 is hydroxyamino,

R^3 is hydrogen or a suitable substituent,

L^1 is $-(\text{CH}_2)_n-$ (wherein n is an integer of 0 to 6) optionally substituted with one or more suitable substituent(s), wherein one or more methylene(s) may be replaced with suitable heteroatom(s),

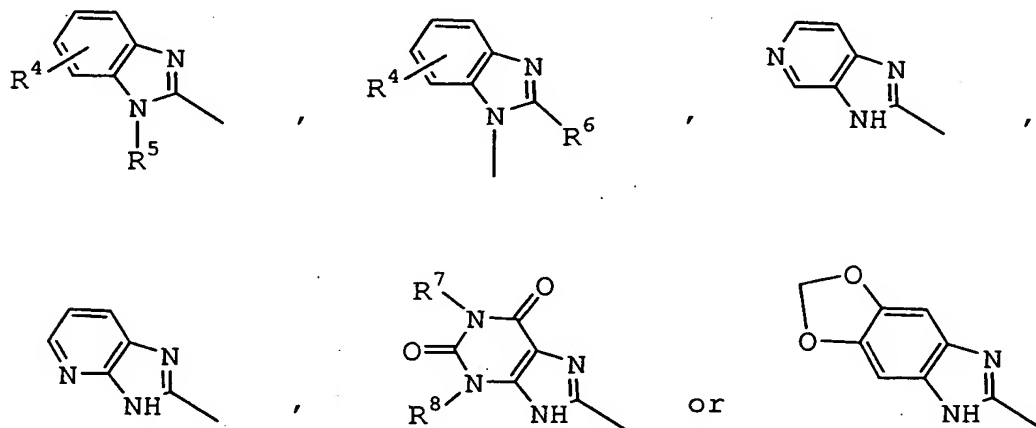
10 and

L^2 is lower alkenylene,

or a salt thereof.

9. The compound of claim 8, wherein

15 R^1 is N-containing condensed heterocyclic ring represented by the following formula:



20

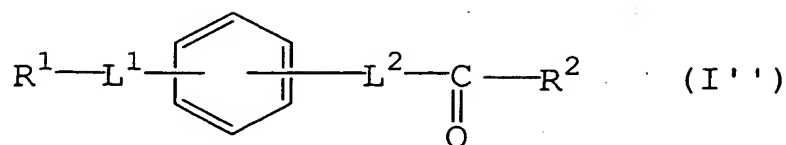
wherein

R^4 is hydrogen or a group selected from the group consisting of

(1) lower alkyl,

(2) lower alkoxy,
(3) aryl optionally substituted with the substituent
selected from the group consisting of halogen, lower
alkanoyl, lower alkylsulfonyl, lower alkoxy and
5 di(lower)alkylamino,
(4) lower alkanoyl,
(5) lower alkoxy-carbonyl,
(6) arylcarbonyl,
(7) aryl(lower)alkoxy,
10 (8) amino optionally mono- or di-substituted with
substituent(s) selected from the group consisting of
lower alkyl, lower alkanoyl and cycloalkyl,
(9) halo(lower)alkyl,
(10) aryloxy,
15 (11) aryl(lower)alkyl optionally substituted with
hydroxy,
(12) carboxyl,
(13) nitro,
(14) cyano,
20 (15) halogen,
(16) heteroaryl and
(17) non-aromatic heterocycle optionally substituted
with lower alkyl,
R⁵ is hydrogen or a group selected from the group
25 consisting of lower alkyl and aryl(lower)alkyl, and
R⁶, R⁷ and R⁸ are each hydrogen or lower alkyl,
R² is hydroxyamino,
R³ is hydrogen or lower alkoxy,
L¹ is -(CH₂)_n- (wherein n is 1 or 2) optionally substituted with
30 one or more substituent(s) selected from lower alkyl(s) and
aryl(lower)alkyl, and wherein one methylene may be replaced
with an oxygen atom, and
L² is vinylene,
or a salt thereof.
35

10. A compound having the following formula (I''):



wherein

R¹ is N-containing condensed heterocyclic ring optionally substituted with one or more suitable substituent(s),

5 R² is hydroxyamino,

L¹ is $-(\text{CH}_2)_n-$ (wherein n is an integer of 0 to 6) optionally substituted with one or more suitable substituent(s), and

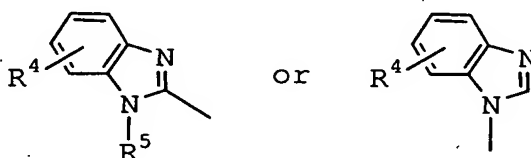
L² is lower alkenylene,

or a salt thereof.

10

11. The compound of claim 10, wherein

R¹ is N-containing condensed heterocyclic ring represented by the following formula:



15

wherein

R⁴ is hydrogen or a group selected from the group consisting of lower alkyl and aryl, and

R⁵ is hydrogen or a group selected from the group consisting of lower alkyl and aryl(lower)alkyl,

20

R² is hydroxyamino,

L¹ is $-(\text{CH}_2)_n-$ (wherein n is 1 or 2) optionally substituted with aryl(lower)alkyl, and

L² is vinylene,

25 or a salt thereof.

12. A histone deacetylase inhibitor comprising the compound of claim 1.

13. A pharmaceutical composition for treating or preventing inflammatory disorders, diabetes, diabetic complications, homozygous thalassemia, fibrosis, cirrhosis, acute promyelocytic leukaemia (APL), organ transplant rejections, autoimmune diseases, protozoal infections or tumors, which comprises the compound of claim 1.
14. A pharmaceutical composition containing the compound of claim 1 as an active ingredient, in association with a pharmaceutically acceptable, substantially non-toxic carrier or excipient.
15. The compound of claim 1 for use as a medicament.
16. A method for inhibiting histone deacetylase, comprising using the compound of claim 1.
17. A method for treating or preventing inflammatory disorders, diabetes, diabetic complications, homozygous thalassemia, fibrosis, cirrhosis, acute promyelocytic leukaemia (APL), organ transplant rejections, autoimmune diseases, protozoal infections or tumors, which comprises administering an effective amount of the compound of claim 1 to a human being or an animal.
18. A commercial package comprising the pharmaceutical composition of claim 13 and a written matter associated therewith, the written matter stating that the pharmaceutical composition may or should be used for treating or preventing inflammatory disorders, diabetes, diabetic complications, homozygous thalassemia, fibrosis, cirrhosis, acute promyelocytic leukaemia (APL), organ transplant rejections, autoimmune diseases, protozoal infections or tumors.
19. A histone deacetylase inhibitor comprising the compound of claim 7.

20. A pharmaceutical composition for treating or preventing inflammatory disorders, diabetes, diabetic complications, homozygous thalassemia, fibrosis, cirrhosis, acute promyelocytic leukaemia (APL), organ transplant rejections, autoimmune diseases, protozoal infections or tumors, which comprises the compound of claim 7.
21. A pharmaceutical composition containing the compound of claim 7 as an active ingredient, in association with a pharmaceutically acceptable, substantially non-toxic carrier or excipient.
22. The compound of claim 7 for use as a medicament.
23. A method for inhibiting histone deacetylase, comprising using the compound of claim 7.
24. A method for treating or preventing inflammatory disorders, diabetes, diabetic complications, homozygous thalassemia, fibrosis, cirrhosis, acute promyelocytic leukaemia (APL), organ transplant rejections, autoimmune diseases, protozoal infections or tumors, which comprises administering an effective amount of the compound of claim 7 to a human being or an animal.
25. A commercial package comprising the pharmaceutical composition of claim 20 and a written matter associated therewith, the written matter stating that the pharmaceutical composition may or should be used for treating or preventing inflammatory disorders, diabetes, diabetic complications, homozygous thalassemia, fibrosis, cirrhosis, acute promyelocytic leukaemia (APL), organ transplant rejections, autoimmune diseases, protozoal infections or tumors.
26. A histone deacetylase inhibitor comprising the compound of claim 8.

27. A pharmaceutical composition for treating or preventing inflammatory disorders, diabetes, diabetic complications, homozygous thalassemia, fibrosis, cirrhosis, acute promyelocytic leukaemia (APL), organ transplant rejections, autoimmune diseases, protozoal infections or tumors, which comprises the compound of claim 8.
28. A pharmaceutical composition containing the compound of claim 8 as an active ingredient, in association with a pharmaceutically acceptable, substantially non-toxic carrier or excipient.
29. The compound of claim 8 for use as a medicament.
30. A method for inhibiting histone deacetylase, comprising using the compound of claim 8.
31. A method for treating or preventing inflammatory disorders, diabetes, diabetic complications, homozygous thalassemia, fibrosis, cirrhosis, acute promyelocytic leukaemia (APL), organ transplant rejections, autoimmune diseases, protozoal infections or tumors, which comprises administering an effective amount of the compound of claim 8 to a human being or an animal.
32. A commercial package comprising the pharmaceutical composition of claim 27 and a written matter associated therewith, the written matter stating that the pharmaceutical composition may or should be used for treating or preventing inflammatory disorders, diabetes, diabetic complications, homozygous thalassemia, fibrosis, cirrhosis, acute promyelocytic leukaemia (APL), organ transplant rejections, autoimmune diseases, protozoal infections or tumors.
33. A histone deacetylase inhibitor comprising the compound of claim 10.

34. A pharmaceutical composition for treating or preventing inflammatory disorders, diabetes, diabetic complications, homozygous thalassemia, fibrosis, cirrhosis, acute promyelocytic leukaemia (APL), organ transplant rejections, autoimmune diseases, protozoal infections or tumors, which comprises the compound of claim 10.
35. A pharmaceutical composition containing the compound of claim 10 as an active ingredient, in association with a pharmaceutically acceptable, substantially non-toxic carrier or excipient.
36. The compound of claim 10 for use as a medicament.
37. A method for inhibiting histone deacetylase, comprising using the compound of claim 10.
38. A method for treating or preventing inflammatory disorders, diabetes, diabetic complications, homozygous thalassemia, fibrosis, cirrhosis, acute promyelocytic leukaemia (APL), organ transplant rejections, autoimmune diseases, protozoal infections or tumors, which comprises administering an effective amount of the compound of claim 10 to a human being or an animal.
39. A commercial package comprising the pharmaceutical composition of claim 34 and a written matter associated therewith, the written matter stating that the pharmaceutical composition may or should be used for treating or preventing inflammatory disorders, diabetes, diabetic complications, homozygous thalassemia, fibrosis, cirrhosis, acute promyelocytic leukaemia (APL), organ transplant rejections, autoimmune diseases, protozoal infections or tumors.